Implementing Science-based Programs Effectively:
A Forum on Fidelity and Adaptation Issues
April 16, 2003

DEBORAH MCLEAN LEOW: Good afternoon. I'm Deborah McLean Leow, with the Center for Substance Abuse Prevention, CSAP's Northeast CAPT. I'd like to welcome you on behalf of CSAP, and CSAP's National CAPT System, which are six regional centers that provide training and technical assistance on substance abuse.

CSAP and its CAPTs are major proponents of science to services, and we're acutely aware of the importance of addressing fidelity and adaptation in this process. This broadcast is brought to you through a partnership with the National Guard, and is being broadcast from the National Guard Training and Education Center in Knoxville, Tennessee.

The National Guard has a long history of partnering with communities all across America to address illegal drugs. This satellite broadcast is just one way in which the National Guard demonstrates its commitment to making America drug free.

We're here today to discuss the implementation of science-based prevention programs, focusing on fidelity and adaptation. And we're going to explore two essential questions, which are first, to what extent can you implement a program exactly as it was designed? And, secondly, when is it appropriate to make adaptations to these programs?

All of today's presentations are available online, to be downloaded. And those of you who have downloaded these presentations will find that you have more slides than will be presented today. Our panelists will be using a condensed version of what you have.

A very important part of today's broadcast is participation from our viewing audience. And so I encourage you to call, fax, and e-mail questions for our panelists. If a question occurs to you during the course of the broadcast, I'd like to ask you to fax that question to the phone number on your screen, which is (865) 985-3880. Or you can e-mail us that question at <tectv@angtec.ang.af.mil>.

There will also be an opportunity for you to call in live to pose questions for our panelists. This will be done during a designated Question and Answer session. The 1-800 number for the call-in will be flashed onscreen at that time.

And now I'd like to introduce our colleague, Dr. Wayne Harding, who will be moderating today's broadcast.

DR. WAYNE HARDING: Thank you, Deb. Again, my name is Wayne Harding. I'm director of projects for Social Science Research and Evaluation in Burlington, Massachusetts. And I'm also the evaluator for CSAP's Northeast CAPT. I have two things to do in roughly the next 10 minutes or so. The first is to outline some of the major

issues that we're going to address during this forum today. And the second is to briefly review the agenda for the presentation.

For over five years now, the Center for Substance Abuse Prevention, the National Institute on Drug Abuse, the National Institute on Alcohol Abuse and Alcoholism, the Centers for Disease Control and Prevention, and the U.S. Department of Education have committed themselves to promoting the adoption of science-based prevention programs, and science-based strategies. These are prevention activities that rigorous research has demonstrated produce the desired outcomes. And as the use of these programs has expanded, so has the need for good and reliable information about how *best* to implement them in the field.

The CAPTs—the Centers for the Application of Prevention Technology—handle, literally, thousands of questions a year about implementation of science-based preventions. And two of the most common questions asked are these. First, where can I find a list of these programs, and a description of what they're about? Second, *when* can I adapt these programs, and by *how much* can they be changed, without risking the fact that this may compromise the outcomes that they produce? These two questions, I think, reflect a tension between maintaining fidelity to these programs on the one hand, and making appropriate adaptations to them on the other so that they better fit, at times, with local circumstances or conditions. I'll say something more about that tension in just a moment.

But first I want to take a second and review some definitions so that we all start out on the same page. The first definition has to do with fidelity, which is really, the issue with fidelity is did I keep the program the same?

Slide #1

Fidelity- Did you keep it the same?

- "The agreement (concordance) of a replicated program or strategy with the specification of the original." (Center for Substance Abuse Prevention, Decision Support System, 2001)
- "The degree of fit between the developer-defined components of a program and its actual implementation in a given organizational or community setting."

One definition of fidelity is the agreement of a replicated program, or strategy, with the specification of the original. Another similar definition is the degree of *fit* that exists between the developer-defined components of the program, and its actual implementation in an organization, or in a community setting.

There are some complications when we think about fidelity, and move a little beyond these definitions. One of the complications to keep in mind is that while most discussions about fidelity concern the extent to which an implementation of a program *matches* the original program, or the model program in question, there's another level. If you propose a program, and propose from the outset to make adaptations from it, then you can also ask if the way in which you actually implemented this program matches the way in which

you deliver it in the real world, over time. So, in effect, there are two kinds of fidelity. There's fidelity to the original program. And there's fidelity to the program as you propose to carry it out.

Another issue has to do adaptation. And the definition of adaptation, which has to do with how and whether you change a program, is "Deliberate or accidental modification of the program."

Slide #2

Adaptation-How did you change it?

- "Deliberate or accidental modification of the program." (Backer, 2002)
- Types – additions, deletions or modification to content, delivery method, target population, setting, or delivery agent. (Formica and Harding, 2001)

Now, an example of an accidental modification to a program might be a reduction in a number of sessions of a school-based prevention program due, for example, to snow days. And there are several types of adaptation to keep in mind. There are additions to a program, deletions to a program, and modifications to a program. And these may occur with respect to its content, its delivery method, the target population, the setting in which the program takes place, and who delivers the program. As with fidelity, there are some complications that take place with adaptation.

One thing to keep in mind is that while we sometimes think of adaptation that occurs at one moment in time when a program is *about* to be launched and implemented, adaptation can, in fact, take place over the life of a program.

Another thing to keep in mind is that adaptations to the *evaluation* of a program are *potentially* as significant as adaptations to the program itself. I may replicate a program perfectly. But if I change the way in which I evaluate it, as compared to the way that was done in the *original* instance, it may be that I don't achieve the same outcomes. Or, at least, that I can't *measure* those outcomes in the same way as was done, originally. For example, if I deal with a smaller sample size than was available in the original program, it would be harder for me to demonstrate significant statistical change.

Let's return now to this issue of the tension between adaptation and fidelity. We have a chart, which we hope will explain some of this.

Slide #3

Advantages & Disadvantages of Replication & Adaptation
REPLICATION (HIGH FIDELITY)

Advantages	Disadvantages
• Program requirements and implementation guideline clearly defined. • Likelihood of success based on evidence of prior effectiveness.	• Program may not meet the needs of your population. • Program may have been designed for different conditions. • Program may require more resources

	than available.

ADAPTATION

Advantages	Disadvantages
• May more accurately meet the needs of your audience. • May better fit local conditions. • May be more feasible.	• Likelihood achieving same outcomes as original program are diminished.

The chart shows some of the advantages, and some of the disadvantages of replication—which is the highest form of fidelity—and adaptation.

Replicating a program brings with it a number of advantages. The advantage of having clear instructions to follow about how to implement the program. And a high *likelihood* of achieving the same outcomes as did the original program.

On the other hand, the program may not meet *exactly* the needs of your target population, or *exactly* the conditions that you face in your community. And it may be that the program requires more resources to deliver, as it was designed, than you can put on the table. The advantages and the disadvantages of replication are, essentially, mirrored by the advantages and the disadvantages of adaptation. By adapting the program, you *can* improve the fit between *it* and the needs of your local population. You can improve the fit with local conditions. And you *may* reduce its resource requirements.

But by making changes in the program, you also run the risk that you will not achieve the same outcomes as were reported for the original, or the model, program. Why is all this an issue? Well, in the first place, there's a limited supply of science-based prevention programs from which to choose. So it may not be possible for a local preventionist to find the science-based program which provides a good match between local needs or conditions, and the programs at hand. Another reason that this is an important issue is, it turns out that adaptation of science-based programs occurs with great frequency. Adaptation, in short, happens.

In Massachusetts, we tracked the number, and the types of adaptations made by 21 sub-recipients of the state initiative grant funding. And there was also a process in place in Massachusetts, by which we asked these local recipients to seek permission for making adaptations. I just point that out because we were being reasonably conservative about approving adaptations in the field. And I believe we have a chart that visualizes some of the findings from this study.

Slide #4

Adaptation
Types and Frequency of Adaptations among MassCALL subrecipients
(Formica and Harding, 2001)

Program Types	Types of Adaptations				
	Content	Delivery Methods	Target	Setting	Delivery Agent
Mentoring (4)	3	3	3	0	3
Family-Based (5)	3	6	2	1	1
Life Skills Training (4)	2	2	1	2	1
SMART (3)	2	9	2	2	2
Other School/Community Programs (3)	3	5	2	1	4
Peer Leadership (2)	1	5	0	0	0
Total	**14**	**30**	**10**	**6**	**11**

The important thing about the chart to pay attention to is simply the bottom row, which indicates the number of adaptations that were made across all of the different types of programs, and by different areas—by content, delivery method, and so on. If you simply run your eye along that bottom row, you see that there were about 70-odd adaptations that were made across a variety of areas. So adaptation, in fact, can be commonplace.

Let me turn now to the objectives of today's conference, and briefly outline the agenda. The conference today has three objectives. The first is to increase understanding of current research findings on fidelity, adaptation, and, in general, effective program implementation.

The second is to increase understanding of the importance of *balancing* fidelity to a program, with sometimes legitimate and appropriate use of adaptation.

The third and closely-related objective is to increase understanding of what strategies and guidelines we have available to us now that give us some information about how to strike the best possible balance between fidelity on the one hand, and adaptation on the other.

Now a word about our agenda. In a moment, Dr. Paul Brounstein, from the Center for Substance Abuse Prevention, is going to continue a discussion, which will help frame these issues. He's going to review some of the key research findings in this area. And he's going to discuss some of CSAP's projects related to fidelity and adaptation.

Following his presentation, we'll have an opportunity to hear from you in the field, and respond to your questions. Then we'll have a break of about 15 minutes or so. When we come back after the break, Karol Kumpfer, developer of the Strengthening Families Prevention Program, Andrea Taylor, developer of the Across Ages Prevention Program, and Pam Adderley, a practitioner of Across Ages, will address common questions they are asked about fidelity and adaptation of their programs, and how they deal with them, and the evidence that they may have available about how adaptations of their programs

have affected outcomes in the past. They then, too, will make themselves available to questions from the field.

And then to conclude the presentation for the day, I'll make some summary remarks, as will Deb McLean Leow, who will return from the Northeast CAPT.

Again, I remind you, we very much want you to become a part of this forum, so we encourage your questions and comments as the discussion proceeds.

And now I'd like to introduce Dr. Brounstein in a slightly more formal way. Dr. Brounstein is Director of the Division of Knowledge Development and Evaluation at the Center for Substance Abuse Prevention, CSAP.

At the division, his efforts are focused on making the links between prevention research and prevention practice more functional. He oversees all discretionary grants managed by the division, including current grants on high-risk youth, mentoring, children of substance-abusing parents, teen parents and welfare reform, family strengthening, and community-initiated prevention programs. Dr. Brounstein is also responsible for ensuring that information developed from these grants is translated in a way which makes the information readily useable by the field. And as part of that task, he's one of the folks at CSAP who oversees the National Registry of Effective Prevention Programs, or NREPP, which identifies effective model programs so that they can, in fact, be disseminated and moved to the field. Paul?

DR. PAUL BROUNSTEIN: Thank you, Wayne. Dr. Harding's done a very nice job of providing the framing and the context of the issues of fidelity and adaptation. I'm going to repeat just a little bit because what I'm going to try to do is make this as user-friendly as I know how.

If you take a look at one of the first pieces of information I'd like to show you, we talk about the issue of fidelity and adaptation, whether they're really two sides of the same coin, or really a more complementary activity.

Slide #5

Fidelity and Adaptation

- Two sides of the same coin or 2 cents to rub together?
- Best thought of as complementary concepts
- Implementors should strive for balance between the two when adopting or adapting effective prevention programs

I think that the best way to think of fidelity is as you might think of, put it this way, as your *significant other* might think of fidelity. It's when *you* remain true to the original plan, whether that's 'til death do you part, or for the length of the relationship. The point is that common sensical view of fidelity is really at the heart of all of the discussions we have. And when we take and look at how evidence-based or science-based programs are implemented in the field, clearly, there is a real trade-off that has to be made. The trade

off being do I do it *exactly* as it was done before? Or do I do it exactly as the plan requires if I'm doing my own development effort? Or do I try to meet the needs of the population that I serve more directly?

A perfect example of fidelity would be an exact replication, both of the program, the process, as well as the evaluation because as Dr. Harding was saying, when you start changing *anything*, you're moving away from that. If you're the developer of an evidence-based program, clearly, what you would like to see is an exact replication because anything else provides lots of possibility for failure to reproduce the results.

A perfect adaptation, however, is going to take pieces of that program and modify them so that they better meet the needs of the client population, the intended audience. And that may be a change in activities. It may be a change in who's doing it. Again, Dr. Harding laid some of those issues out.

One of the things that we don't talk about often though, is the process that has to go on *before* you've decided to implement to science-based program. The planning that's required is really going to determine, to a large extent, the success that you have as a community in implementing these programs. And key to this is in this planning process is the idea of making sure that number one, you do a solid needs assessment of the population that you're trying to work with. What is it that they need? What resources can you and the community bring to bear? And matching both of those with the requirements of the program. Poor planning is almost *surely* going to result in a failure to achieve the results that you want. And in case I forget, I should plug that the Center for Substance Abuse Prevention has developed a framework for this planning process, called "Achieving Outcomes." And through the CAPTs and others, we will be offering pretty extensive training on this.

If we look at what's on the screen now, we can see that, again, adaptations can be made on a whole lot of levels. And there are lots of great reasons for making adaptations. We can change the number of sessions. We can change who's implementing. We can change some of the activities that people engage in. And we do this, always, with an eye between the relationship between the program and the outcomes that are desired, mediated by the population that we're serving.

There are some dangers in doing adaptations, though. And the potential problems are that you can attenuate the original program effectiveness.

Slide #6

Why It Matters

- Adaptations can also attenuate program effectiveness
- Insufficient dosage
- Changing time schedules to compress program
- Inappropriate changes in activities given theoretical model of change
- Poor translation in attempts to make interventions culturally, age, or gender appropriate.

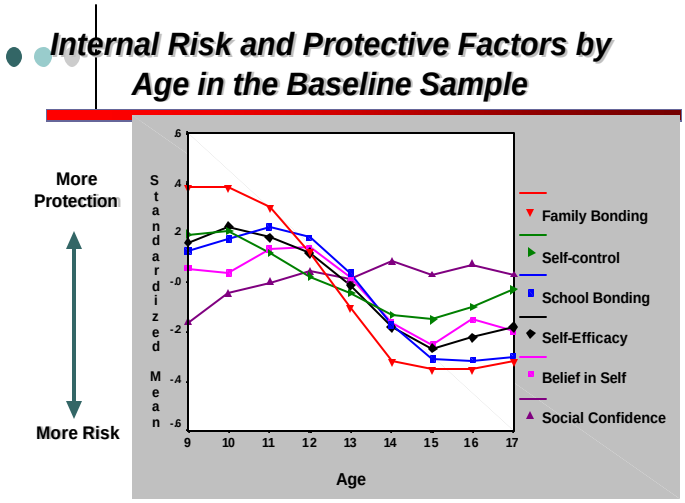
That is, the effects that you would like to see occur—the reason you adopted the science-based program in the first place—can disappear because the level of exposure to the program has been cut, you've decreased the number of sessions, whether it's accidental because of snow delays, or because resources have run out, and you just don't have the time or the money.

You can have inappropriate changes in activities, so that a mentoring activity in one group, when translated to another, seems irrelevant to that group. So, again, when we do this, we have to be very mindful that poor translation in any way, shape, or form of the way we're implementing the program can result in negative effects.

One of the questions that we've asked at CSAP is what is the evidence base—because we do appreciate an evidence base—that talks to the appropriateness of adaptation versus fidelity? Or how one goes about trying to strike the balance? One of the sources for data that we looked at very closely is the High-Risk Youth Cross Site Evaluation. This was a study done in 48 sites. Each site had a comparison group and a participant group. More than 10,000 youth participated, between the ages of say 12 and 17, though there are some outliers on either end. And they went through the system. But by and large, the first and probably most important result of this study was a clear demonstration that prevention activities decreased substance use, or prevented it, and, certainly, was instrumental in doing the onset of substance use. All of these things talk to the effectiveness of the study efforts.

If we look, though, at the screen, what we'll see in this next chart is that the kinds of programs that occur as a variation of age really need to make very different focuses of very different areas of emphasis.

Slide #7

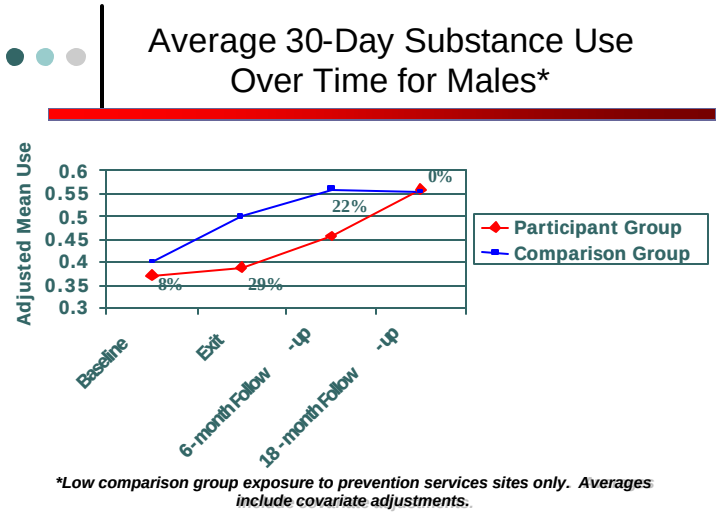


So if we look at the screen, we see this is a set of information about Internal Risk and Protective Factors, and you'll see the exact same pattern in the larger program—which is not going to be on the screen—for External Risk and Protective Factors. But the key here is youth up to about age 11 are relatively high on most of these internal protection

factors, or low on the risk factors. But at about age 12–13, you can see very, very sharp decreases in things such as family bonding, belief in self, self-efficacy, social confidence. What happens throughout this, though, is that sometimes we take a program that's targeted, specifically, for younger people and ride it through to the end, and it's no longer appropriate. One of the keys in all of this is people who bond to positive social institutions are less likely to use drugs. If we focus on family bonding, say at age 9 and 10, we may not see those same effects down the line. The place where we really need to start really working in that area is going to be at around age 12–13, when it starts to plummet. So what we see from this graph, the conclusion I'd like you to draw from this is that as a function of age, we're seeing different needs, and we're going to see needs for different adaptations of programs. Developmental or age-appropriateness is very important.

Across this, what we also see is that males and females differ in the way they responded to these programs. So if we look at the graph on the next chart, which depicts 30-Day Substance Abuse for Males, what we see at baseline is there's no difference between treatment and comparison groups.

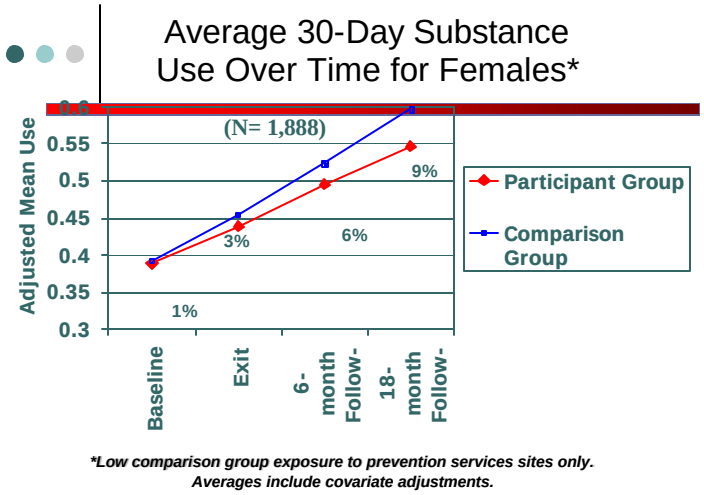
Slide #8



By the point of program exit, there's a 29 percent difference in level of use—30-Day use—for males who participated, versus males who were in comparison groups. At the program end, there's no more prevention activities that occur. And what you see is a relatively rapid increase in substance use, so by 18 months—subsequent to the finish of the program—males in the treatment and comparison groups are using drugs again, at about the same, and a heightened level. The implication for this, of course, has to do with the need for continued programming, booster programs, and such.

When we look at the same chart for females, what we see is that there's an escalation across the board for females.

Slide #9



**Low comparison group exposure to prevention services sites only. Averages include covariate adjustments.*

And at the point of exit, there's no difference at all between females in the treatment and comparison groups. However, by 18 months, the females in the comparison group are escalating at a less rapid rate, and you're seeing significant differences in their use. This pattern is extremely different from the pattern for males.

The implication of this is that, of course, the programming that's required for males and females may be slightly different. And in fact, when we look at what worked for males and females, it was the same *type* of programs. Skills-building programs—with lots of opportunity for practice and rehearsal—tend to work for both groups. What happens, though, is that the males seem to respond directly to the stimulus, to the programming, as long as it was in place. And when it was taken away, when it stopped, they reverted back to their old social norms, their old peer groups, and escalation of drug use ensued.

Females, however, seemed to have taken a longer time to internalize the message, but maintained it longer. So, again, clear implications for adaptations of program.

The other thing that we looked at—and this is very important, because the question about cultural competency and cultural tailoring of programs is a very important one. And the High Risk Youth Survey provided a very opportune time to start looking at 'did cultural tailoring of programs lead to a difference in outcomes?' And what we see from these results, from these 48 sites, from the 10,000 youth, is that, in fact, programs that were culturally-tailored—especially those tailored for African-American youth—had effect sizes about twice as large as programs that were *not* so adapted.

The interesting piece on this is that, of course, the cultural adaptations were added to the basic program, *and* seemed to have been mediated by the fact that when the youth participated in these programs, they were more satisfied with the programs, they thought the program was more important, they *came* to the program more often, and received an increased level of program exposure. So, again, the same thing that's happened—in terms of the skills-building and the rehearsals and things—really end up producing the largest

part of the effect. *But* the cultural tailoring got the youth to the program more often, got them to be more engaged by the program, and increased the effective dosage of the program.

So, again, we talk about whether or not this makes sense, and certainly, it does. And it provides some real credence to the argument that we should tailor our programs to meet specific cultural needs, to get into the world of the person, or group of persons, that we're trying to assist.

So given these data, one asks the question, 'Why wouldn't communities jump at the opportunity to adopt science-based programs?' We know that they work. We know that they *can* be tailored. And when they *are* tailored, they have important effects. And I think to understand that, we need to think a little bit about the trajectory of innovation. It's not a simple piece. Basically, the classic research and development model says that there is an innovation. It occurs. It's tested. There's an initial dissemination effort. And people who are on the cutting edge of whatever that particular field is—whether it's IT, Information Technology, or electronics, or in this case, prevention programs—move towards it, adopt it, and try it out in their own systems. And from there, we end up in a diffusion process, and there's a slow growth and spread of these programs.

But the larger problem is is that there are many things working *against* the adoption and adaptation of evidence-based programs. Science-based programs are perceived to cost more. Science-based programs are perceived as requiring different staff resources, different training needs. By and large, while this can be the case, it's more so for the clinically-oriented programs than for the general science-based or evidence-based programs that are out there. What we need to realize is that we're already expending efforts and staff time and dollars on what we're *currently* doing, because everyone *is* trying to address substance use, in terms of both prevention, and early intervention. The issue is thinking about how one can creatively substitute something that we know has worked, and can work for you, with something that we may not have any data on, or may know really is not working, optimally.

And part of this is fed by a commercial establishment that produces sexy, glossy, brochures that people can buy from a central location and just have, or programs that come in and do the work for you so that you don't really need to expend resources. Good science is hard work. Good prevention is hard work. The payoff is that good prevention leads to children and adults who are not using substances, illegally, or to their own detriment.

Again, one of the issues for us is always planning comes first. And you need to identify the needs of your population to see, 'Do you need the more expensive clinically-oriented program that requires licensed, or accredited, clinicians to implement the program? Or are you looking for something in the school-based program or arena?'

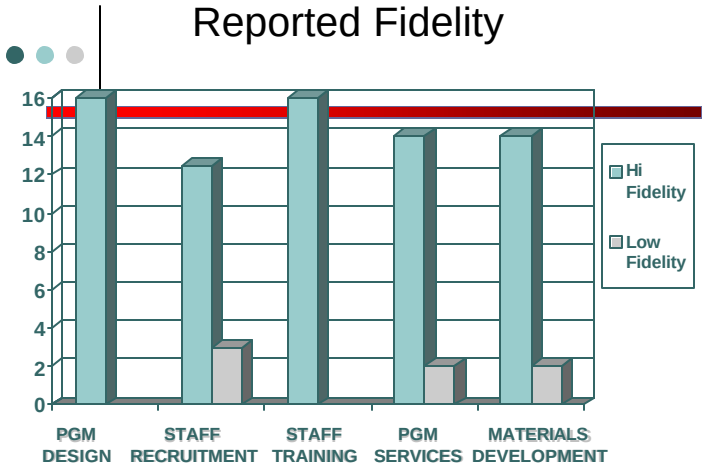
So we know that we can adapt programs. We know that science-based programs work. The issue, also, for communities, is well, even if I wanted to replicate with very high

fidelity, is it possible? Can I really do the same job that someone getting a large grant from the National Institute of Health has done, and do that, and get the program to work? CSAP took some of these programs and identified in '94 and '95, identified nine models of programs that had high potential for success. They were not successful. We didn't have outcome data at the time. But what we knew was they were well managed, they were theoretically anchored, and the activities also fit with what the underlying theory of the program was—they should have led to change. We gave out 16 five-year grants as part of this replication initiative. The 16 grants funded 16 implementers, some of them whom you'll meet later. Karol Kumpfer actually received one of the grants to replicate someone else's program. And Andrea Taylor received one of the grants to replicate her own program, and also to serve as a mentor for someone else replicating her program. And, hopefully, we'll talk a little more about that.

The goals of the replication initiative were 1) to see if we could replicate such programs, 2) to see if we could replicate their evaluations, and 3) to determine whether they were still effective as they were working with other populations in other situations.

The first question about the chance of actually doing replication is answered by the data that you'll see on your screen.

Slide #10



And what we can see is a very clear report from all of the folks that across, virtually, every characteristic of the study that we looked at, there was high, high levels of fidelity. So the answer to the question is yes, you can replicate with fidelity. Fidelity was measured, by the way, on specially-constructed survey items that were developed just for this effort, hundreds of items that talked about every aspect of program implementation.

And next we want to look at what happened. And so again, what happens in this is that sure enough, when we replicated the program process, when we replicated the evaluation, what we ended up seeing was that we got a very good, solid replication of results. So not only could we replicate the program, but it maintained its effectiveness even as it was applied in other areas. So important outcome is that this can work. It's not to say it should

be the *only* way things work, because again, there are some very positive, potential advantages in adaptation. But the fact is that it *can* work. And if we stick to it and do a program with fidelity, we should get the same kind of outcomes.

Some of the grantees also looked at level of fidelity and outcomes. And what we found, again, was a very positive relationship. The greater the level of fidelity, the stronger the outcomes.

When we talked, also, with the folks who were doing the replications, they highlighted a number of advantages. Number one was quicker startup, less resource-intensive. They knew what they needed to do, they were able to staff up quickly; they had the plan all ready, and they were ready to go and set it in motion, providing services very quickly.

They also—because these were current programs—they also had a freely accessible source of technical assistance and training. Again, this from both CSAP's perspective, and the CAPT's perspective. This is very, very important in doing any kind of program. And it doesn't really matter what the area of program initiative is. If somebody's not there to answer your questions, if somebody's not there to show you the inside of how these programs work, it's going to be very hard to replicate with sufficient fidelity.

So there were some very, very positive aspects to this. The next piece that you'll see on your screen really talks to the issue of well, how do we resolve the debate? How much fidelity is sufficient? How much adaptation can we endure, and still get the same kind of results?

Slide #11

Resolving the Debate

- Debate on whether to favor fidelity of adaptation is far from resolved and may be too one-sided
- Limited research available suggests both are important

Slide #12

Resolving the Debate (cont.)

- Fidelity to "core" ingredients of the innovation is probably essential to achieving program efficacy
- Best results are achieved when fidelity to core features is supplemented by adaptation that involves locally tailored additions or enhancements

I think what we've talked about so far indicates that both are important—fidelity and adaptation.

The adaptation, though, has to be done within certain limits. And one of those limits is set by understanding what the core components, what the *key* active ingredients are to any implementation. And I guess what we've tried to do—in the guidance we've given so far—is to talk about the fact that it's important to have fidelity to the core ingredients

while looking at adaptations to add them, specifically, to *make* the program more engaging for the folks that you're trying to reach. And that's what we saw happened in the high-risk youth. When those adaptations were offered, it *did* engage the people more. They attended more, and they got better results.

So now the question is, 'How do we know what core components exist?' One of the initiatives we've taken up is just that, a Core Components Analysis, where we've trained coders, reviewers to look at, so far, 21 model programs. A model program is CSAP shorthand for saying the program is well implemented, well evaluated, has produced consistent, positive results, either over replications, or across measurement domains within the study, *and* for which technical training and assistance is available through the developer or accredited trainers.

We reviewed all the program materials of these 21 model programs and found a number of interesting commonalties across them. The first was that successful programs—and this should come as no surprise, given the last 15 minutes of my talk—successful programs maintained high fidelity to the program plan. Just that simple. They *did* what the program required of them to do. They also did *not* just stick to substance abuse. They looked at a more general approach to teaching skills—social skills, communication skills, and life skills—as well as providing information about substance use avoidance, and the dangers of it.

Effective programs went beyond looking at individual level of change. They tried to change systems. They tried to work with intact groups, whether it was a peer group, or a family group. But a social support network of some kind. And that's related to the next finding, which was they used a consistent message, or messages, across a number of institutions, or actors. The idea here is you change social norms by creating the perception that there is consensus that something is either good for you, or not good for you. The more different institutions you have saying that, the more different people you have saying that, the more persuasive the message, in general.

And again, parental involvement was often a key, whether it was through homework assignments that got the child talking to their parents, or whether it was through joint sessions. Parental involvement was absolutely important in all of these programs.

Effective programs got into the world of the client. They used language. They made cultural adaptations that fit the client's developmental and cultural needs. That was just true pretty much across the board. And, again, we can speculate about why that tends to work as well as it seems to.

One of the other key findings—and I've already alluded to this—is that it was imperative that training and technical assistance be available so that others could 1) implement with fidelity, and 2) get clear direction and guidance on what are the characteristics that they *could* change to make this more culturally compelling?

So in conclusion, and we'll see this up on your monitor, the knowledge of active ingredients in science-based programs provides guidance.

Slide #13

Conclusion

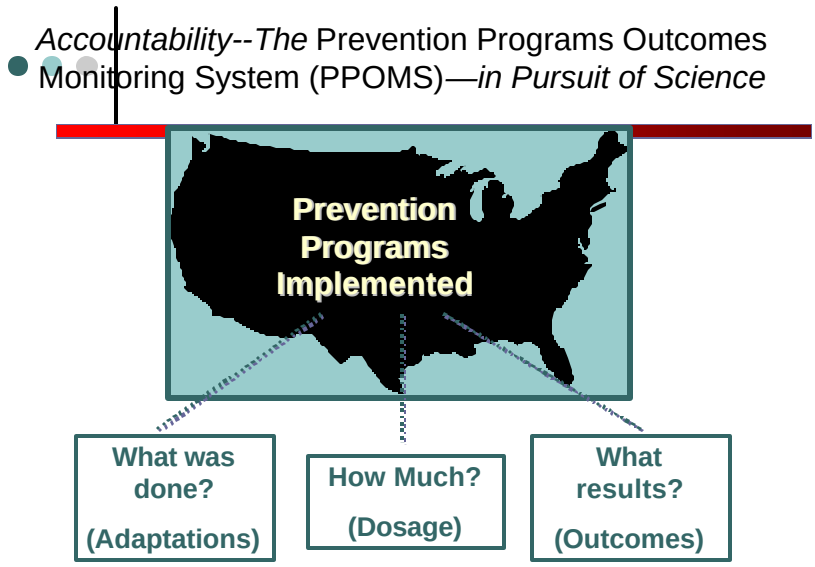
- Knowledge of the active ingredients in a science-based program provides guidance on where and how to adapt a program without losing fidelity.
- Programs adapted in line with CCA may in fact prove more effective than those unaltered from their original form.

Programs adapted in line with the Core Components Analysis may prove more effective than the original program. And we *do* see this, that when you do add those adaptations to the basic core to which you've maintained real fidelity, you *do* get improved outcomes.

So the question is, 'Where do we go from here?' What's next on the agenda? How do we discourage the adoption of fads, and ineffective, or non evidence-based programming? How we know which ingredients are core components, and how much we can adapt them? And also, what kind of adaptations are beneficial? Where do we fall down when we do make adaptations?

One of the things CSAP is sponsoring and we've just gotten permission to engage in is something that we call the Prevention Program Outcome Monitoring System.

Slide #14



The PPOMS for short—so now you all have an image of a cheerleader—PPOMS has goals of quantifying the number of evidence-based programs, looking at the penetration rate of evidence-based programs, trying to assess outcomes, how much of the program was given, and how have adaptations been made?

There are two primary sources of data for this. The first will come from the state incentive grants, which have about 2,500 programs among sub-recipients in 41 states now. And we'll be polling each of those programs to see what they did, how much they did, what did they adapt, and what are their reported outcomes? We'll also be doing a national survey to pick up other funding agencies and community-based organizations, including coalitions, to find out from a representative sample what have they been doing in the same way? When the data is all in, what we should be able to do is start looking across replications in this naturally occurring experiment, and say, 'For this type of program, we had 300 observations. The minimum dosage that seemed to have been required to produce any effect at all was 80 percent, or 60 percent,' and then threshold dosages for more and more effect occur at certain levels. We'll be able to track what adaptations have been made, with what outcomes have been experienced, and as a result, provide a much more clear guidance to the field about what it is that they *can* do with these evidence-based programs, what things they *can't* change, what they *can* change.

So in terms of final, tentative guidance before all the data is in, I'd like to look at the screen and just go through where we're coming out, in terms of our guidance to the field.

The first is to plan properly. There is no substitute for good planning. Your third-grade tried to teach you this. They certainly tried to teach me this. I didn't learn it 'til later in life, but, hopefully, people are more advanced than I was. But the point of it is, you *need* to know what your resources are, you *need* to know what the needs of your population is, and you *need* to be able to match those to programs, and then adapt those programs as necessary.

Secondly, you want to maximize program fidelity to the core components whenever possible.

Slide #15

What You Can Do To Enhance Effectiveness

- Maximize fidelity to program model
- Add adaptations if at all possible, don't substitute for regular activities
- Review program philosophy and logic model; make sure changes made are consonant
- Talk to developer and/or certified trainers about modifications

You want to *add* adaptations. You don't want to *change* key components of the program and adapt them. You want to make these culturally relevant. You want to make them age relevant, developmentally relevant. That's all fine. But you've got to remember there are going to be key components that can't really be changed, dramatically. And in this vein, the best source for information about what these key components are are the developers themselves, or accredited trainers, that the developers are trained to go forward with the model.

[Thirdly], we're in the process now of developing logic models with the developers, themselves, for each and every one of CSAP's Model and Effective and Promising Programs that are identified on our web site. The idea, again, is to look at the model,

understand the program philosophy, understand the core components, or the key pieces of this, and the causal flow. If you're changing causal flow and adapting them, don't necessarily expect to see the same result. So that's another key piece of guidance.

Lastly, perform routine assessments.

Slide #16

Final Recommendations

- Perform assessments
  - Pre, post and at intervals along the way
  - Process and outcome
- Feedback results to further improve program
- Cooperate with National Surveys (PPOMs)

There's no substitute for monitoring the effectiveness of what you're doing. Do the assessments. Look at them, and treat them as the important pieces of information they are. This is feedback to you about, are you reaching your intended audience? Are they going through, or moving through, the process the way they're supposed to? Are they getting the amount of the program? And are they giving you any feedback about where the program's falling down?

And from a personal point of view, you may get called about cooperating with the National Surveys, such as PPOMS. Please do. That's my plug for the day. Thank you.

W. HARDING: Thank you very much, Paul. That was helpful. And perhaps we'll get some questions from the field to follow up on. We had some questions that were raised, earlier. We can start with those, if you'd like.

P. BROUNSTEIN: Sure.

W. HARDING: One has to do with the whole domain of environmental strategies, and the use of coalitions as another prevention strategy. So far we really focused the discussion in the main on programs that are more unified and were easily described as curricula, if you will, in some cases, although not in all. Whereas when we talk about environmental strategies, we're talking about coalitions, we're talking about much more diffused—perhaps more difficult to define—interventions. How does the whole issue of adaptation fidelity apply to those kinds of prevention efforts?

P. BROUNSTEIN: That's a really good question that gets asked a lot. I think one of the things that we need to do is understand what we mean by program. I think a lot of people say well, you know, you have a program if you have a curriculum, or a trainer's manual. But I think, in truth, the issue is something that we call environmental strategies, I look at as environmental programs. I have a set of goals. I have a set of objectives. I have a set of outcomes that I want to achieve.

Now, there are sets of steps that I can take to achieve those goals. If I chose to, I could create a curriculum. I would need to leave an awful lot of room for adaptation. There's no doubt about it. Every community's going to be different, and who you have to talk to, and how you have to leverage your resources. But the general guides exist to allow us to say, 'If I want to change a law in my community, I need to talk to people who are opinion leaders. And of those opinion leaders, these three may be absolutely crucial.' So when we look at that, we look at that as a program. We do understand that a lot more leeway needs to be given, in terms of adaptation. But that there are some core elements that you still need to pay attention to.

And when we talk about coalitions, the same kind of issue occurs. There are strategies that are used to develop a coalition. And that's fine, because there are lots of different ways to organize. But the purpose of the coalition is to achieve some change in behavior at the community level, or even at a specific population level. So, again, I sit back and I think well, while every coalition may be somewhat different, there are a number of common pieces that bond them together. And we only know if they're effective by really looking at the level of change that follows their activity. So that it may be great to band seven institutes together, or seven institutions together, but if they don't go out into the field and do something effective, was that a good use of our time? And I think coalitions are a great way to get things done, in communities, small or large. But, again, I would say that in order to evaluate how they're doing, I would subject them to the same kind of tests of you've got to demonstrate evidence that you *have* changed behavior, at some level. So, again, more latitude in terms of adaptations, for both of those types of programs. But still, there are common themes and some common core elements that we would need to adhere to.

W. HARDING: And along with that increased latitude, in terms of the kind of implementation that takes place, is there, then, if you will, an increased burden for evaluation to kind of track what's going on so that we can learn from these experiences?

P. BROUNSTEIN: Absolutely. And there are easy things evaluators can do, and there are difficult things evaluators can do. Evaluating environmental efforts can be incredibly complicated, and expensive. *But* the payoff, I think, is substantial in that when you have an environmental strategy that works, you're affecting an awful lot of people at one time. And so it's worth the effort.

W. HARDING: From your point of view, what do you think some of the large, *still outstanding* questions there are, with regard to fidelity and adaptation, the kinds of things that we still don't know a lot about, and would like to know more about?

P. BROUNSTEIN: That, again, is another good question that has a lot of people puzzling. And if anyone from the national institutes are watching, think program announcement. [laughter].

W. HARDING: That is an announcement for funding to conduct research in this area.

P. BROUNSTEIN: Yes, for funding to conduct research in this area. There's been an awful lot of work that's been done on dissemination of innovation. But when we try to apply that, specifically, to what makes programs work, it doesn't really help, significantly. We're still tackling issues of what *are* the active ingredients in prevention programs? What core pieces *can* you change? Or can you leave out? You know, we have never dissected many of the programs, which are often multi-component, multi-function programs and said 'if the marginal impact of adding this component to the first component is worth the while.' And that's the kind of research, again, that's going to provide some kind of definitive answer as to what the building blocks of prevention really are. I don't see that happening any time in the future. So…

W. HARDING: Has part of that have to do with just the evaluation challenge that that kind of a study poses to deconstruct a program and try to answer questions about which of these several components really seems to be essential in making the difference, versus something that's less essential, or even, perhaps, non-essential, but we're blind to that, at present?

P. BROUNSTEIN: Well, part of it is the difficulty of the task. Part of it is the resources that are made available for undertaking the task. The kind of experimental work that would be required to do these kinds of demonstrations would cost a lot of money, and be logistical nightmares.

We're trying, at CSAP, to kind of work backwards from the naturally occurring experiment that we have, using the PPOMS approach, looking at 'look, this is what's really happening in the field today. Can we learn anything from it?' Now, we're not, necessarily get to the active ingredients because we're not in the position, necessarily, to dissect session by session, or piece by piece. But what we *will* get to is threshold dosages for effectiveness. We'll get to what kind of adaptations are acceptable. And *that* is important in providing immediate guidance to the field about 'you're doing evidence-based programs, you want to make them fit your population. Here are some ways you can do that.'

W. HARDING: And doesn't that also, potentially, we hope, in part, speak to issues of efficiency, as well? In other words, if a program could prove to be, virtually, as effective in 10 sessions as in 12, it would cost less to implement, it would, perhaps, make more sense to understand that that can be done?

P. BROUNSTEIN: Mm hm.

W. HARDING: Because part of the success story for prevention has to be not only what outcomes does it produce, but at what cost?

P. BROUNSTEIN: Absolutely. And I think you've answered the question because you're absolutely right. One of the problems that we always have in moving effective prevention to the field is limited resources. And one of the greatest limited resources is not, necessarily, money. It's time. So without knowing if I can do a 20-session program

in 10 sessions, who knows? The field is sitting there kind of going 'well, I've got 10 sessions that I can do, and this is the program that I need. So I'll get half the effect.' Well, no, that's not, necessarily, the way it works.

W. HARDING: You may get none of the effect.

P. BROUNSTEIN: You may get none of the effect. Or you may get 80 percent of the effect, because we don't know what the appropriate dosage levels are to achieve outcomes. And that, again, is one of the things we're hoping PPOM will answer.

W. HARDING: I think questions like that—with respect to school-based programs, for example—are especially timely when we're in an environment in which academic accountability and performance is such a crucial concern around the country. And so it's often the case that legitimate questions are raised about the extent to which a school system can *afford* to devote 12 sessions or 20 sessions, or whatever the number might be, to prevention activities, versus pursuit of the three R's.

P. BROUNSTEIN: Right. And, again, it's one of these things where schools are also facing the requirement of the month. Today, we need a substance abuse prevention program. Tomorrow, or next month, it's an HIV program. The next month it's a violence prevention program. So *they're* under the gun—PUN not intended— to use their limited time with the kids as effectively as possible, while trying to layer on one or more of these new tiers of programs. And so they're in a real bind, also.

W. HARDING: Well, since you opened the door, another issue that arose—so let me walk through it—has to do with the relationship between the issues that we've been speaking about, and different *kinds* of prevention programs, or prevention programs, to put it another way, that target different problem behavior. So far in the discussion, we've really focused on substance abuse prevention as the primary example. Appropriate, since doing this under the auspices of CSAP. But when it comes to HIV prevention, suicide prevention, teen pregnancy prevention, teen delinquency prevention, those other kinds of efforts, what is there to be said about the state-of-the-art concerning what we understand about adaptation and fidelity, and *those* domains? Is it reasonable to assume that the same issues apply to programs in those domains? Do we *know* about the extent to which they apply? This is getting to be an awfully compound question, but you see where I'm going.

P. BROUNSTEIN: It's reasonable to assume that the same rules apply. When we look at risk and protective factors that are related to violence, or mental health issues early in life that are related to teen pregnancy, or sexual activity, or smoking, or substance abuse, we see that there's a constellation that's shared in common. Now, the *demonstration* of whether or not the same kind of adaptation and fidelity issues occur in those programs isn't, necessarily, explicit. So it is an assumption. I would fall back and say the National Registry—which is one of CSAP's efforts to identify evidence-based programs—has been working with all of these areas, has catalogued effective programs in all of the commonalties…

W. HARDING: So the Registry, itself, is not simply focused on substance abuse. It's a wider domain of programs?

P. BROUNSTEIN: It's much wider. Substance abuse. HIV. We've got even gambling, and tobacco. Physical activities. We're branching out in a lot of different directions, the idea being that it's a resource for communities to go to and say, 'We've done our needs assessment. What we're really looking for are some ways to approach specific problems of violence prevention.' So we're trying to house as much as we can all in one place. Again, given the common risk and protective factor framework and understanding of what some of the precursors are for these activities, given the inter-relatedness of the activities—youth who drop out are often substance abusers; substance abusers are often sexually active early, and getting pregnant, and spreading STDs—there's no reason to believe that the same issues of fidelity and adaptation wouldn't hold. But, again, as I said, the data has not been put forward in any explicit way.

W. HARDING: So the state-of-the-art isn't such at this point. We can't speak to it, definitively, but we can make reasonable assumptions about what a case is.

P. BROUNSTEIN: Well, maybe the state-of-the science isn't, but the state-of-the-art would argue, yeah, it can be done.

W. HARDING: The state-of-the-art is such that we can do that?

P. BROUNSTEIN: Absolutely.

W. HARDING: And speaking about the state-of-the science, you discussed for a bit, you referred to and described, the PPOMS initiative, for example, which sounds like because the sample size is very large, because there's an enormous variety in the types of programs that were funded under the SIG initiatives across these states—I've forgotten the number now, but many states—…

P. BROUNSTEIN: Many. Forty-one, now.

W. HARDING: Forty-one states. That those are the normal kind of conditions that we look for when we think of doing cross-site analyses and teasing out the kind of variables that make a difference, in terms of outcome. So it's kind of a rich domain, if you will, in which to be working. How *long* before we can expect to see results from that kind of an effort? Because it's certainly not a trivial one.

P. BROUNSTEIN: No. And we're going into the field, probably in a month or two, to do the survey part. The first round of data's been collected at the SIG level. So I'm hoping somewhere six to nine months we'll have some top line results.

W. HARDING: Well, that's actually fairly soon.

P. BROUNSTEIN: Yeah. Yeah. I'm excited about it.

W. HARDING: It's very promising. Is there anything more that you'd like to add about where we stand, in terms of the state-of-the-art, and the kind of outstanding questions that you'd like *most* to see answered?

P. BROUNSTEIN: Let me try a different tact, because I think one of the things that I really feel I need to push for is that for all the people who are implementing a program, they really do engage in a planful process to not just identify programs and make adaptations, but to *monitor* that. And documenting that monitoring will add more to the state-of-the-science than funding a couple of studies, because *that* is where real world practice meets the road, so to speak. And if we *know* what people are doing, if we *know* how they've adapted, and we *know* what the results are, we can actually sit back and say, 'You know, this worked. This didn't work. Now let's look for the reasons so we can inform the science agenda *if* we have some basic information about what's going on.'

W. HARDING: So if I understand you, what you're suggesting is that the practitioner in the field has a lot to say to scientists about what they should be looking at, what are the burning issues that they should study in a more detailed way, over time, how this will lead to new knowledge in the field. So information has to flow in both directions.

P. BROUNSTEIN: Absolutely. You know, we talk a lot about the science-to-service cycle. But the other part we never talk about is the service informing the science agenda. And that's *just* as important.

W. HARDING: Ron Slaby used to say that good prevention practice—good treatment practice, for that matter—was dependent on combining two sorts of information. And that was the evidence from good science on the one hand, and the wisdom from good practice on the other. It's the same sort of general idea.

P. BROUNSTEIN: Perfect. Mm hm.

W. HARDING: We're going to be moving to break now for about 15 minutes, or so. Oh wait, we have a call, I guess, we can take from Vermont. Vermont, are you on the line? Vermont, are you there? I guess we've lost Vermont.

P. BROUNSTEIN: So we're down to 49 states, now. [laughter]

W. HARDING: We're down to 49 states, now. Correct. Okay. Well, perhaps then we will move to break for about 15 minutes. We will reconvene. When we do reconvene, we'll be joined by the other speakers. But Paul will stay with us, and be commenting on the presentations that they make. Thank you very much, Paul.

P. BROUNSTEIN: Thank you.

[BREAK]

Slide #17

CSAP's NE CAPT
CSAP's Northeast Center for the Application of Prevention Technologies (NE CAPT) serves the six New England states and five mid-Atlantic states.

Slide #18

CSAP's NE CAPT
Its job is to transfer science-based knowledge and effective programs to State and local levels in order to strengthen their capacities to prevent and reduce alcohol and other drug use.

Slide #19

CSAP's NE CAPT
The NE CAPT is located within the Health and Human Development Programs at Education Development Center, Inc. (EDC), Newton, Massachusetts.

Slide #20

CSAP's NE CAPT
The NE CAPT is funded by the Center for Substance Abuse Prevention (CSAP), Substance Abuse and Mental Health Services Administration, Department of Health & Human Services Grant # UD1-SPO8999-03.

W. HARDING: Welcome back. Before we get started, I'd like to, again, thank the National Guard Bureau, and the National Guard Counter-Drug Office for their support in bringing this program to you. In addition, I want to thank the men and women here at the National Guard Training and Education Center in Knoxville, Tennessee, whose broadcast expertise has allowed us to bring this show into your community.

As we start again, we're joined once again by Paul Brounstein, and some new folks, Karol Kumpfer, who will be speaking about the Strengthening Families Program, Andrea Taylor and Pam Adderley, who will be speaking about the Across Ages Program. And I'll introduce each of them in more detail in a moment.

Let's begin, in fact, with Karol Kumpfer, who will speak first. Karol has some 20 years experience in drug abuse prevention and treatment. She recently served as the director of the Center for Substance Abuse Prevention. A psychologist and author who promotes a substance abuse prevention model built on strengthening and empowering families, Dr. Kumpfer is an associate professor of health education at the University of Utah. Her research and publications are in the area of family, school, and community interventions to prevent drug abuse in youth, and in the areas of needs assessment and evaluation measurement, as well. Dr. Kumpfer has served as president of the Society for Prevention Research, and chair of the Subcommittee on Effective Prevention Programs for the American Psychological Association's Task Force on Prevention. Karol?

DR. KAROL KUMPFER: Thank you very much, Wayne. It's a pleasure to be here today, and to discuss fidelity and adaptations and programs for prevention of substance

abuse. I think that, probably, the Strengthening Families Program was selected as one of the programs to be discussed on this show because it was one of the first programs that has been developed that actually began, to begin with, with testing the different core components. We really didn't start with *the* Strengthening Families Program.

We started with a research question. That was, 'Of the major kinds of programs you can do in prevention, what do we need to do? What works for prevention?' We started with a program that was a parent-training program. Then we looked at adding to that a children's skills-training program. And then we added to that a family-relationship program. And we actually did a dismantling design, starting back in the early '80s, using money from the National Institute of Drug Abuse. And what we discovered from that is that you, basically, get what you pay for. That the Strengthening Families Program that, eventually, became all three components was a program in which what we had was the parent-training program *reduces* the negative acting out behaviors in the kids. The children's skills-training program *increases* their problem-solving, decision making, peer-resistant skills. The family relationship program enhances the family relationship. So it turns out that, yes, if you *wanted* to actually reduce the risk of drug abuse in the kids, you needed to have all three components. But they all do different things. So you have to make a choice.

The Strengthening Families Program, then, was tested based on those positive results in six different CSAP—the Center for Substance Abuse Prevention—grants to do cultural and age-appropriate adaptations.

Slide #21

Background: Strengthening Families Program (SFP)
History

- 1st research-based prevention program for children of substance abusers
- Many cultural adaptations developed on CSAP grants with positive effects
- Junior high SFP version found effective on NIDA and NIMH grants with long-term follow-up studies
- Two recent randomized trials show SFP effective for general families

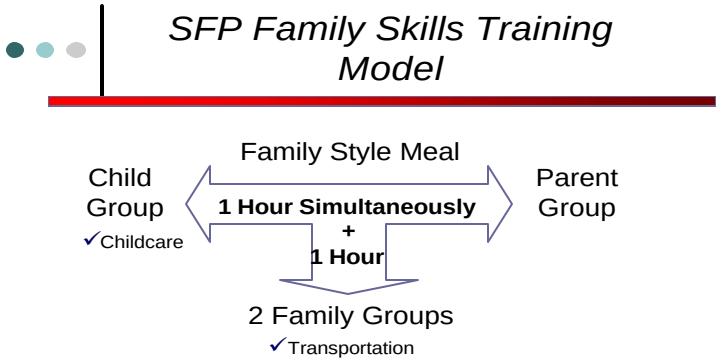
So we had many cultural adaptations based on these different grants. And we found, basically, positive effects from those. I'm going to talk more about the results from that.

Recently, we have a junior high school version that's been tested on NIMH and NIDA grants, with great positive results that seem to be increasing every year, as the kids age more into eleventh grade, twelfth grade, first year of college, to the point where now NIDA is saying 'This program has a nine dollar, sixty-cent cost benefit ratio.' The program was, originally tested *just* for children who were children of addicts, in methadone, and outpatient drug treatment clinics. But we're now testing a program where there's universal populations in schools and communities. And, recently, this year we've published two different, randomized, controlled trials that showed that Strengthening Families was effective *with* general populations of kids that were recruited through

elementary schools, or through community centers in Washington, D.C., on our NIDA grant that we're doing there.

I want to next show the Strengthening Families Skills Training Model so you understand what Strengthening Families really consists of.

Slide #22



The model begins, first of all, with a family style meal that helps to get everyone there. We've actually found that fathers are easier to recruit if you have food that they like. [laughs] Some were resistant to participating in the sort of "woman" activity having to do with parenting, but if you've got good food that they like, they *will* come.

Then the families break into the children's groups, which is 14 sessions long, where they learn children's social skills training, life skills. The parenting group is a basic behavioral parent-training program, also based on evidence-based models of Gerald Patterson and research at the University of Oregon.

And then the second hour, they split into two family groups. There are *two* group leaders for *each* one of these groups. So it takes *four* people, altogether, to run the program. Two that *like* to work with children—I emphasize that that's important. They *like* working with children. And the second are two facilitators who are very effective at working with parents.

Transportation is another important element of our programs, as well as childcare for younger children.

What we have also, then, what you'll see in terms of what I'm going to show next is the outcomes for the Strengthening Families Program.

Slide #23

SFP Outcomes

- Improve family relations
- Increase parenting skills
- Increase children's skills
- Decreased children's depression and conduct problems
- Increased school success/grades
- Reduced parent & child AOD use

Across the different replications, so far, that we have outcome results on, we're now able to see consistency in finding improved family relations, increased family organization and cohesion, reductions in family conflict, decreases in children's depression and conduct problems, increases in school success and grades, and reduced parent and child alcohol and drug use.

Interestingly enough, it really wasn't on the first research grant that was a dismantling design. We did not really get reductions in the children—the older children in the family, plus the older kids participating in the program—and their alcohol and drug use, or the parents' alcohol and drug use until we combined all three components. And we've just had that replicated, now, with almost 800 families in Washington, D.C., where we got significant reductions in the parents' alcohol use, but only in the full program.

We've looked at, then, some of the successful program implementation components for all the different replications that have been done.

Slide #24

Successful Program Implementation

- Effective and well-trained leaders & staff
- Sufficient resources
  - incentives
  - child care
  - transportation
  - food
- Interactive/experiential techniques
- Booster or reunion sessions

And we do find that it's very important to have well-trained leaders and staff. I think we need to be talking more about quality, as well as fidelity, and a lot of the quality *comes* from the training and the selection of the best-qualified people for implementing the program.

Next is having sufficient resources. Basically, having incentives for completion of their homework assignments, their home practice assignments, or attendance. It really does make a difference in getting them to attend. And we *do* know that the number of sessions that they attend makes a difference in how much they change, and how much they learn.

Child care is important in recruitment and retention. Plus, it allows even the little children to feel like they're *part* of this family program.

Transportation is important in helping get families who *don't* have reliable, accessible transportation available to them.

And food, it turns out, *is* a core component. One of our questions that we quite often get is, 'What can we do? Our funding source will not allow us to pay for food. Is that really essential?' And we have discovered that, yes, food is essential. If you really want them to come, expect to get their children there, their whole family there, you need to have food. And it doesn't have to cost a lot of money, just food that they like.

Another thing that we've learned about successful program implementation is—and this is mirrored, also, in the results that Nan Tobler has from her metanalysis, and that is that having experiential exercises, interactive exercises, making the program fun where they really do skills training. This is *not* education. We've learned that just teaching people about what they ought to do, and how they ought to change through an education class does *not* work as well. You do *not* get the same kind of effects sizes that you do for interactive programs where they do role play, where they have little skits, where they have home practice, where they really have to implement and change their behaviors.

We've also learned that booster sessions, or reunions, are important, too, in terms of keeping up the ability of these groups to interact later. They're making connections. They're learning to get to know each other. And if you can have reunions where they can come back, look again at what they've learned, then we're finding greater effectiveness.

So then, the central, core elements of the Strengthening Families Program that we've discovered, over time, is that you *do* have all three of the skills training courses—the parent program, the children's program, and the family program, that you *do* do all 14 sessions.

Slide #25

Essential Core Components

- All Skills Courses: Parent, Child, Family Skills Training
- All 14 Sessions in right order
- Supporting Components:
  - Meal
  - Child Care
  - Transportation
  - Incentives

Whenever they have cut the sessions to eight sessions, to 10 sessions, you still get positive results, but they are not as strong, in terms of the strength of those results.

And it needs to be in the right order. We've had some programs say well, gee, we're working with programs that all the parents *are* in treatment, they've already gone through their denial of their alcohol and drug use, so we'll move to session nine on dealing with alcohol and drugs, up to session one. Well, wrong, in terms of they're not through the denial of the impact it's had on their children. So you hit them with that immediately in their first session, and you can get dropout. We discovered that on one of our adaptations.

So there's theory, there's lots of practice, in terms of why you do the program in the order you do. You first focus for four weeks on positive strengthening the family. The next four weeks on family communication. And the last four weeks you're focusing, primarily, on discipline, monitoring, and parenting. And it needs to be in that order. You do the discipline and effective monitoring up first—which is what all the parents want—they leave after the fourth session 'cause they've got what they want. But it doesn't work as well as if you start building positive family relationships, first. So there's a logic behind even the ordering of these effective science-based programs.

We're already talked a little bit about the supporting components. I want to talk now about planning for the implementation of the program. For Strengthening Families, there's three basic things that you need to do. One is select the best program.

Slide #26

Planning Process for Implementation

- Select best version of SFP based on age, needs assessment, and culture.
- Purchase CD-ROM including:
  - Parent, Child, and Family Skills Training Manuals
  - Parent and Children's Handbooks
  - Implementation Manual (literature review and process issues addressed)
  - Evaluation Instruments (including fidelity tools)

We have lots of different versions of Strengthening Families, so you need to choose which is the right version, based on age. We have an elementary school version, and a junior high school version. We are, regularly, having people who want to implement with junior high school kids contacting people who are doing the elementary school version, and vice versa. So *really* read the program description, and *look at* the age you're targeting.

Also, the needs and the culture. We have different cultural versions for, basically, every single race, and a lot of other ethnic groups, as well, *within* races. So be sure that you're purchasing the correct version.

Then contact us at the University of Utah to purchase the CD-ROM. We have *all* of our fidelity manuals. Strengthening Families Programs is all on standardized curriculum manual. So we have a parent training manual, a children's skills training manual, a family skills training manual. There are the parent handbooks, and the children's handbooks, and the implementation manual with the literature review, and all the process issues that you need to learn about how to handle your groups. And then, also, your evaluation

instruments are included on that CD-ROM. We make it real easy for you. You then have a limited site license for the $250.00 that purchases all these manuals to make as many copies as you want for your agency, for as long as you're doing Strengthening Families, and for as long as you're working with your parents and kids.

Then the next thing is to look at what kind of fidelity tools we have. If you're doing this program, you want to know if you have good fidelity. *Within* that CD-ROM, what kind of fidelity instruments do we have? Well, the fidelity tools, then, include fidelity issues, are quite often, first of all, addressed in the training.

Slide #27

Fidelity Tools

- Fidelity Issues Addressed in Training of Group
- Leaders
- Sample Fidelity Tools Supplied
  - Group Leader Session Evaluation Form
  - Session Fidelity Checklists for Observers
  - Attendance and Engagement Forms
  - Outcome Pre-Post Test Measures
  - Client Satisfaction with Leaders Rated

The 2-day training that we do, or the 3-day training, when we come out on the second day, we're actually doing practice sessions. And in those practice sessions, we ask people to follow the curriculum, or the lesson that they've selected to implement with a practice group of people role playing children or parents in your group. We ask them to also make it more creative, but within certain guidelines. And they are supposed to then, they then implement the program, and then we critique it. Then we look at *how* did that adaptation got made? How well did that work? We talk to the people role playing the clients and children. How do you think this will really work for *your* own population that you're working with, in your agency? That really helps with dealing with a number of fidelity issues. We learn a lot from them working with the practitioners in a collaborative. And we discuss it.

Then there are also the fidelity tools that are supplied for Strengthening Families. And we have *less* complicated ones, and *more* complicated, depending upon whether you're doing a research project or not.

There are the group leader session evaluation forms. The session fidelity checklists for your independent observers, which are, quite often your evaluators will come in from the outside, randomly, to do fidelity checks. Your attendance and engagement forms, which the group leaders and the site coordinator fill out on all your participants at the end of every session to see how well is this material really working for them? Do they really seem to be understanding it? Are they enjoying it? Are they learning it?

Then you also have your outcome instruments, as well as your client satisfaction with your group leaders. And I think this last one is terribly important. We only started doing

the quality, basically, the quality of the leaders as perceived by the clients until recently. And I think our field has *really* neglected looking at issues of the *qualities* and the *characteristics* of the group leaders and the implementers in our programs, which I think probably contribute to between 60 and 80 percent of all of the positive outcomes. We now have included, we worked with practitioners to develop about a 16-item checklist, where the clients, themselves, at the end of the program, will rate their group leaders on these characteristics. And we're trying, then, to get some idea *which* of these characteristics really contribute the most to positive outcomes. We have to get more at the issues of quality.

Next we have what were some of the results from the replications? First of all, I should mention that Strengthening Families has been replicated now for every, single cultural and ethnic group.

Slide #28

SFP Replications & Cultural Modifications

- Tested culturally adapted versions of SFP available for
  - African American
  - American Indian
  - Asian Pacific Islander
  - Hispanic/Latino (Spanish language)
  - Multi-cultural
- Age adapted SFP versions available
  - Elementary
  - Jr. High School

So we have replications for African American families, for American Indian families, for Asian/Pacific Islander families, for Hispanic/Latino families. We now have all of our manuals and instruments translated into Spanish. And we're hoping to get one done in French, and in Portuguese. Recently, I just came back from a European conference on prevention, and discovered there's a tremendous amount of interest in family-based programs in Portugal, and in Spain, and also in Italy, interestingly enough.

So as I mentioned, Strengthening Families has age adaptations, as well as we have the different language manuals.

There are also, I should mention at this point what the results are, our results for these different adaptations. We actually tested them, so this was not just naturally-occurring experiments. But the results of the Strengthening Families cultural adaptations have been published now in Prevention Science, in an article by myself and Dr. Rose Alvarado, Paula Smith, and Nicky Bellamy, who is at CSAP now. What we did in the Strengthening Families programs that were tested on the CSAP grant, what we said was, "First, do the program for two years, as is." This was when they had a 5-year grant. So two years, do Strengthening Families as is, with just some minor modifications.

Slide #29

Results of SFP Cultural Adaptations

(Kumpfer, Alvarado, Smith, & Bellamy, Prevention Science, 2002)

- Evaluated results of adaptations compared to original SFP implemented in first two years in five studies found:
  - Recruitment and retention were significantly improved by about 40% for cultural adaptations
  - Outcomes basically identical, but slightly worse if adaptation involved reducing number of sessions or changing order
  - Cultural adaptations also accomplished by hiring culturally-competent group leaders

We tested those results, *against* the last two years where what they did was that they worked with our cultural consultants and their families and implemented a more culturally-revised adapted version.

What we found was that the evaluated results of the adaptations *did* compare very favorably to the original Strengthening Families Program that was implemented in the *first* two years. However, there were some differences. One of the things we found was that the culturally-revised version—recruitment and retention—was significantly improved by about 40 percent. Now, that's an important outcome for a prevention program because if you can't get them to come, you're certainly not going to be able to have positive outcomes for them. So it was important.

We also discovered, though, that the degree to which the program's number of sessions were cut, the program order of the sessions was changed, we got reduced results. And those programs were cut to 8–10 sessions, the results were just not as good, and all the people who have done that have moved back up to 14 sessions. So I think cultural adaptations are very important in *getting* people to the program, but you still have to be sure that you are keeping the essential core components.

We've had some questions that have been asked about adaptations. Things like can we compress the course length? Based on what I've said, I think you can understand that it's probably not a good idea to cut out sessions at all.

We've also recently discovered that we *thought* that we could do the program twice a week for only seven weeks, and have discovered, recently, on our NIDA grant that those sites are not looking like they're getting as good results by compressing the program into a shorter period of time, but with the same number of sessions.

We've been asked can we skip meals if our budget is really tight? And we discovered, no, you will not get as many people coming if you don't have meals.

Do we have to have two group leaders for the parents' group and the children's group, or can we just simply do it with one person? Well, if it's the only way you can do it, then that's okay. But it really is highly desirable, especially in the children's group, to have

two group leaders. In fact, some of the sites where they have a lot of children of addicted parents that have been fetal alcohol and drug exposed, we're finding that sometimes you need to have three group leaders. They're actually getting teenagers, now, in their coalitions that are working on teen leadership programs to come in and help be additional leaders in the children's groups. And they are doing fantastic jobs with that.

So I think I'll just wrap it up here, as my time is out. I think I've covered most of the important things.

W. HARDING: Thank you. And perhaps you can come back on some other issues during the question and answer period.

I want to now introduce our next two speakers who are sharing their time together today. So I'll introduce them together. First, we have Andrea Taylor. Andrea is the director of Youth Develop Initiatives at Temple University's Center for Intergenerational Learning. She's also a senior research associate with Temple University's Institute for Survey Research, and is involved in studies of programs designed to prevent tobacco use with adolescents. She's the principal investigator project director of several prevention programs that use Intergenerational mentoring to prevent school failure, substance abuse, and teen pregnancy. And one of these programs, Across Ages, is the focus of our discussion today.

Dr. Taylor provides consultation training and technical assistance to a variety of private organizations, universities, school districts, and federal and state agencies. And she is joined today by Pam Adderley.

Pam is the prevention coordinator for the Across Ages Dissemination Project, which serves middle school students attending after-school programs in the city of Philadelphia. Pam has had extensive experience working with urban youth and their families. Prior to her current employment at Temple University Center for Intergenerational learning, Pam worked at Big Sisters of Philadelphia. She also worked as a positive youth development training specialist, and youth development counselor, and a mentor and pregnancy prevention facilitator. So, indeed, she's had lots of experience in the field.

She also, currently, in addition to her work at Temple, volunteers as a rape crisis counselor at the Jefferson University Hospital, in Philadelphia.

And I think, Andrea, you're going to start?

DR. ANDREA TAYLOR: I am. Thank you very much for that introduction. I'm going to present an overview of the Across Ages Program, and some of the issues that we have learned, also, around the fidelity and adaptation. And then I'm going to turn this over to Pam, because she is doing the program right now, and can really give some good, positive, illustrative examples.

Before I start, I just want to say that Across Ages is coordinated by the Center for Intergenerational Learning, and our mission is to really bring generations together as a way of addressing some very serious community needs.

Slide #30

Across Ages
An Intergenerational Approach to Drug Prevention

Often, when people think about an Intergenerational program, they think about the Brownie troop that sings at the nursing home at Christmas time. And that's really not what we're talking about, here. We're talking about programs that are ongoing, that are meaningful, and that really bring people together to look at some of their community issues.

Across Ages was developed, initially, and implemented in 1991, as a school and community-based project in Philadelphia. The program targets middle school students, and, specifically, sixth graders who are making the transition from elementary to middle school. The program has four components to it, and this is very important because it's a very comprehensive approach.

The first component is recruiting mentors who are all order adults, who are 55 years of age and older; although, how we came to that as a definition for older adults, I'm not sure. But most of our mentors are in their 60s and 70s.

The second component is involving the children in community service. In the case of the original models, they visited with residents in nursing homes, on a weekly basis. The children also participate in a social competence training, which is really problem solving. And, finally, we have monthly activities that involve the children, their mentors, and their family members.

Now, these four components were really grounded in the research that looked at what it is that enhances resiliency in young people. And the first and number one most important thing is to provide a caring adult for children who don't have that in their lives.

The community service piece, really, is looking at engaging kids in meaningful work. And if you look at some of the research that Emmy Warner did on resiliency, she talks about children who can find caring adults in their lives, and who are engaged in meaningful work.

The social competence training, obviously, gives kids the capacity and the skills to be able to do some problem solving, and to help them resist peer pressure. And, obviously, as you can tell from the work that Karol is doing, anything that you can do to involve families in positive activities with youth is really going to strengthen the family relationship.

The original project in Philadelphia was school and community-based, as I said, and the youth involved were, primarily, African American. There were some Latino, some Asian, and some Caucasian youth involved. The subsequent self-replication that we did in Philadelphia, the children were, primarily, African American. The replication that took place in Springfield, Massachusetts, was African American and Latino.

There are, currently, 55 replications around the country, in urban, suburban, and rural settings. And those projects also target youth who are of different races and ethnicity's. Since this is a CSAP-funded project, we don't need to talk too much about what the goal of the project is. But just looking at our objectives, obviously, we wanted to increase the children's drug knowledge, and a no-use intentions attitude. We really wanted to foster some healthy attitudes and behaviors around substance use. We wanted to improve their school bonding, to strengthen their relationships with adults and peers, and to enhance their problem-solving skills.

In terms of the outcomes—and this has been pretty consistent—we've actually been doing the program in Philadelphia in one iteration or another, for the past 12 years. But in terms of our outcomes, we found that we had an improvement—these are all statistically significant, by the way—improvement in knowledge and reactions to drug use, there was a *decrease* in their drug use, specifically, alcohol and tobacco.

Definitely an improvement in school-related behavior. And this manifested itself in increased school attendance, and decreases in school suspensions. There was an improvement in their attitudes towards school, their attitudes towards adults, in general, and older adults, in particular—which is very important—and an improvement in their well being.

What we found, we actually set up our evaluation design so that we could really tease out the effects of mentoring, because mentoring, as many of you know, is very trendy right now. But there has been a dirth of good evidence that mentoring works. So we were able to set up our groups so that we could really pull out the mentoring piece. And what we found was that the level of mentor involvement was, positively, related to improvement in various outcomes. And the more consistent and intense the mentor relationship was, the better the children did.

I believe, in terms of how the program, when I go out to do training, I really look at the ways in which the program can be modified, and those elements that can't be changed.

In terms of the modifications, the target population—you *can* do this program with children who are younger, or who are older.

Slide #31

How Can Across Ages Be Modified?

- Target population
- Community service activities
- Life skills curriculum

- Setting

But, again, the issue is to understand what is age appropriate. In addition, you can also change—as I said, it's been adapted for children of different cultural groups. You have to understand what's *culturally* appropriate.

In terms of the community service activity, the activity can be changed. You don't have to do have your kids visiting with residents in nursing homes. And, in fact, we've made some of these adaptations to some of our subsequent models. However, what's important about this piece is that there is reciprocity that the children are involved in serving the community, that they have meaningful and ongoing relationships with the people that they're serving.

The social competence program can also be varied. We use something called the Social Competence Promotion Program for Young Adolescents, which was developed by Roger Weissberg and his colleagues at Yale University. There are many communities around the country that have some type of life skills program already in place. And it seems ridiculous for them to have to reinvent the wheel. Again, what's important here is that the life skills be culturally appropriate, *and* evidence-based.

The setting can also be changed. As I said, we have done our program, initially, as a school-based model. We're working now to do it as after-school. And it's, again, the critical issue here is to understand your own networks, and to be able to build those partnerships.

What *cannot* be changed? The core components. All four components must be done.

Slide #32

What Cannot Be Changed

- Program components
- Age and roles of the mentors
- Screening and training of mentors
- Training and orientation of ALL participants
- Vigilant monitoring of the mentor-youth matches
- Qualities of staff
- Adequate staff

And I think Karol pointed that out—in terms of her own program—that you really can't focus on one or the other. The research is based on all four components.

There *must* be adequate dosage. This is a relationship-driven program. The children are meant to be in this program for a year. It takes at least six months for a good, strong mentoring relationship to be developed. So I would urge program implementers if they don't have that kind of startup time, they can't really nurture those relationships, this may not be the program for you.

The aging roles of the mentors. Again, our research is based on the older adult mentor. There may be some exceptions. I'm actually working with some American Indian groups around looking at the role of elders in the community, and the fact that the term 'elder' does not, necessarily, correspond to somebody who's an older adult. Those are appropriate kinds of adaptations.

But, in general, if you were to call me and say, "I really like your model, but I'd like our mentors to be 30," I will probably say, "No." That's Big Brothers, Big Sisters.

I think the other very important component of this is the project infrastructure. You must have an infrastructure in place that can really support the mentoring relationships, and also the implementation of all of the program components. This really includes the recruitment, the screening, the training of the mentors, the training of all the participants, and vigilant, vigilant monitoring of those mentor-youth relationships.

You must also have adequate staffing, and adequate resources. This is *not* a program that can be done with a part-time coordinator. Simply because you're recruiting mentors and they are volunteering their time, doesn't mean that you can match mentors and kids and send them on their way, and wish them goodbye and good luck and we'll see you in six months.

And I think, lastly—and Karol really emphasized this, and I would also emphasize it—is the qualities of the staff. The programs are only as good as the people who are implementing them. And I'm delighted to have my colleague, Pam Adderley, with me here today because she's an example of that. It requires people who are really dedicated, who understand youth and older adults, and who are willing to really put in the time, and make the commitment to having these programs happen.

I do want to mention one last thing before we go over to Pam. And I think Karol also talked about this. In terms of people who are interested in implementing, it's very important, I believe, to contact the developers of the programs to make sure that you are really on the same page with how the model is supposed to be implemented, *what* are the issues around fidelity and adaptation, and to really talk with the program developer, particularly for people who are writing proposals.

We also have materials available, which are designed to be purchased *and* replicated for programs that have received training. This is not a program that can be done without training. You can't pick up the manual and go to the first page and say, okay, I'm going to do Across Ages, because it will not work. So I'm now going to turn things over to Pam, so she can really talk about some of the nitty gritty, nuts and bolts of doing Across Ages.

PAMELA ADDERLEY: All right. Nuts and bolts. Successful adaptation. We found that there are many things that help the Across Ages Program become successful. But just a few of them are knowing exactly what things you can do.

It's very important to build relationships with the school, and surrounding community and organizations.

Slide #33

Successful Adaptation of Across Ages
- Build relationships with school and community organizations
- Careful screening, training, and supervision of mentors
- Community service must be on-going
- Orientation of youth and families
- Family participation

It's important to ally with libraries, community centers, neighborhoods, block communities so that you have a variety of places to fall back on, and for young people in the community to become connected with, and familiar with, as well as families.

The careful screening, training, and supervision of mentors is essential. It's very important to provide weekly support—via telephone—for mentors, as well as monthly in service meetings, and many trainings, and to have an open door policy, and accessibility to staff for support at all times.

The community service projects, as Andrea mentioned, have to be ongoing. It's extremely important that the projects provide service to others, and foster connectedness for the students, or the youth in the community, and with the older adults.

Orientation of youth and families are also very important. It's important to have a site orientation for the students, as well as parent orientations for the families. This, we know, helps not only to inform the parents and the students, but also to have them understand the project, and it improves buy-in, 100 percent. We know that families who understand the project come to activities. They bring their other children. They bring other family members. And they support their students, as well as the mentor.

And, lastly, we know that a successful program is only as good—like Andrea said—as the people who implement it. And parents, siblings, mentors are very aware of people who are genuine. So it's extremely important that we show care and empathy to our students, families, and mentors. They recognize it right away, and that causes us to develop a wonderful, positive relationship with them. Those things are important.

The challenges. It's very important that we allow enough time for planning.

Slide #34

Challenges to Adaptation of Across Ages
- Sufficient planning and start up time
- School and community climate
- Mentor recruitment
- Family reluctance

- Understand youth learning principals

Six months' planning is sufficient. Sometimes, it's extremely challenging to recruit mentors, and to have them trained, and screened. These things take time. So we must allow at least six months for planning. And sometimes you have to do some research to find out the community that you're working with, the ethnic makeup, the cultural makeup of the community to be sure that you're going to try and head off some things before you get to the start date of your program.

It's important, also, to do some research surrounding the school system. In Philadelphia, we had a major transformation in our education system, where Edison has taken over, and everything we thought was going to work out just perfectly, actually, we were completely turned around, and we needed to do a little catch up. So it's important to find out ahead of time what's coming for the upcoming school year. How might that affect your recruitment for your students? How might that affect your site placement?

Mentor recruitment. This could also be a challenge, especially where men are concerned. It's been our past experience that it's been quite difficult to recruit older adult males. Sometimes it's a cultural issue. Women are, often times, viewed as the nurturers in a family or a community, and men are providers. So sometimes that could cause a bit of a challenge. So that six months' planning time is a great time to identify those things and to really work out a specific challenge, or opportunity to a challenge, in recruiting your male mentors.

Family reluctance to mentor involvement. It's important for us to have parent orientations so that all the parents are aware of the role of a mentor. We can't express, enough, how important it is for families to become involved from the very beginning. Often times, they're not clear on what their relationship will be, what the mentor's involvement will be, if the mentor will take on a different role, that of a grandparent. And until they come to the parent orientation, they'll have this confusion, and it really *does* affect the relationships. So it's very important that we inform our parents, and that we actually go out and do the orientations *in* the community, not, necessarily, where it's most convenient for the program, but where it's most convenient for the families.

Lastly, is to understand the learning principles of our youth. We need to make it fun, make it involving for the children—if that means through dance, through music, through theater. We just know to meet our students where they are, and utilize their forms of expression to learn. So those are the challenges and the model for making a successful program.

W. HARDING: Thank you, Pam.

A. TAYLOR: Can I just add one thing?

W. HARDING: Sure.

A. TAYLOR: I just want to go back to, I think, it was the second thing that Pam talked about, which is understanding your school and community climate. And I think this gets into, probably, any kind of planning that a model project would do, particularly, if you are dependent on a school system, or really kind of even the political climate in your community.

We had a situation in Philadelphia where there was a major change, and it really not only affected what was going on *in the classrooms,* but it had a filter down effect to all of the after-school programs in the city. For this particular version of Across Ages, we are disseminating it through after-school programs. And it really had a significant impact on how we were able to implement this dissemination. So I think, sometimes, you can *think* that you're anticipating every aspect and every element, and you find that you really can't. But I think as much understanding as you can have, of your community, and what might affect the outcomes of a program, the better off you are, in terms of the implementation. Thank you.

W. HARDING: Thank you. We have a call on the line from Wyoming. Caller, are you there?

WYOMING caller: Yes. We're here.

W. HARDING: Okay. Do you have a question?

WYOMING caller: Yeah. The group of us sitting here are wondering about the cultural changes that each of the programs have done. And we were wondering if anyone…

W. HARDING: Excuse me, caller. Can you turn down your television set so that we don't get an echo? And then start the question again? Hello?

WYOMING caller: Okay, is that better?

W. HARDING: Yes, it's a lot better. Thank you.

WYOMING caller: Okay. We were wondering if anyone has addressed the cultural change regarding gay families in any of their programs? And I'll take my answer off air. Thanks.

W. HARDING: Okay, so I guess the question is 'Have any of you addressed issues of gay families, in terms of program design, or experimentation?'

K. KUMPFER: We don't have a specific *version* for gay or lesbian families, but, certainly, in our definition of family, we make it clear from the very beginning that the definition of family is based on how the *family* defines itself as a family. And I think that's critical. I mean, any of these programs will work very well. We *could*, definitely. There *may* be versions of Strengthening Families for gay and lesbian families, and I don't know because there are so many spin-off versions. I can't keep track of them all. We

have them for foster families, and adoptive families, and depressed families, and families with schizophrenic parents, in-home versions, and versions where the parents have lost their kids and are trying to reunify with them. So we have so many spin-off versions that it's possible. I don't even know.

That's one thing we have a hard time controlling. You know, we tell people to adapt it for their own local population, and it may be that we have adaptations for that.

W. HARDING: Andrea?

A. TAYLOR: I would agree with what Karol is saying. We don't actually have a specific program that addresses that particular family. But what's *important* when we work with our mentors, when we provide mentor training, we really emphasize the fact that the definition of family can be very broad. And it may not be the definition of family that they grew up with, for example, *but* there are many family configurations and family dynamics, and it's *extremely* important to be aware and be sensitive to those.

W. HARDING: I was also struck by the fact that both of you also talked about the challenge of getting males, as a family component, involved in the program, and tempting them with food, and perhaps other devices to get them involved.

A. TAYLOR: Food is very important. Extremely.

K. KUMPFER: And having group facilitators who are also male. If they come and they see other men there and as the group leaders, also, that they're more likely to come back.

A. TAYLOR: And in terms of mentor recruitment, we have two outreach coordinators who are responsible for recruiting mentors. They are both retired African-American men. And we're, of course, targeting an African-American population in Philadelphia. So when they go out to recruit, men can see themselves in that role. And I think that has actually proven to be very successful for us.

W. HARDING: We had a couple of questions come in earlier, actually via fax, from Buck's County, Pennsylvania, their country prevention system. I think they're both interesting and maybe challenging questions for the group.

The first one is—and I'll read it as best I can—'Do you believe that a program should be implemented with fidelity *the first time* so that adaptation can occur in a thoughtful and considerate manner?' I suppose, thereafter. Reactions to that question?

A. TAYLOR: Actually, Karol, why don't you take the lead on this, and then I'll…

K. KUMPFER: That actually matches the design that we had within the CSAP grants, where it phased in, where they were asked to first do the program with basic fidelity. We also say in that very first adaptation, when you do it with fidelity—that it's still doing it

with fidelity—to make it more culturally appropriate, but you're not *changing* anything, dramatically.

Just an example, in our program where we're teaching speaking skills and listening skills to the kids, and we'd say, you know, look the person that is speaking to you straight in the eye. Well, obviously, in an American Indian culture that I come from, you don't do that with Grandma and Grandpa. You don't do that with your elders. So we say go through all the manuals, and work with your families, your staff, your adaptation team and do away with anything that is just culturally insensitive, that just is not going to work. And change that. But then go ahead and do the program. And as you're doing that, work with everybody to make those cultural adaptations that will make it even stronger for you.

W. HARDING: So start off focused on doing the program the way it was designed, basically?

K. KUMPFER: Basically, yeah. The way it was designed.

W. HARDING: And then think, later, once you get comfortable doing that about what adaptations *might* be appropriate.

K. KUMPFER: And you'll *learn* in the process what will work better.

W. HARDING: Sure. Taking that kind of conservative approach to evolving adaptations.

A. TAYLOR: I think I kind of have a foot in both camps, in some ways, which is why when I provide training, I talk about the elements that can be modified, and those that can't. Because what I do find is I'm working with sites around the country that are replicating, that I almost have to begin working with them, immediately, to start looking at some of the adaptations that they make have to make in order to make it appropriate for the community. But then there are other elements that I'm really very rigid about, that can't be changed.

W. HARDING: Let me move on to the second question. I'm looking in Paul's direction, because I think, perhaps, he has a notion about this one. Question is about terminology in the field, and as we all know, terminology in the field is always a challenging thing.

K. KUMPFER: It's always changing.

W. HARDING: It's *ever* changing, and different people use different words, sometimes to mean exactly the same thing, and sometimes *not* to mean the same thing. It's important to be clear about it.

So the question is, 'Are the terms science-based, and evidence-based interchangeable?'

P. BROUNSTEIN: How much time do we have? [laughter]

W. HARDING: Lots of time.

K. KUMPFER: Is there a quick version of that, Paul?

P. BROUNSTEIN: The quick version of that is if you stop and take away all of the assumptions that are built into these terms—and this is important because what you find is if I'm saying something is evidence-based, what I expect you to *hear* is that not only was the evidence *there*, but it was positive, and it derived from a reasonable evaluation, or research design. That's my expectation of what you hear when I say evidence-based.

When I say something is science-based, I have, pretty much, the same kind of expectations. I'm communicating clearly that the science was good, but I'm expecting *you* to hear that the results were positive, as well. So in a sense, what I'm saying in both of those terms depends completely on my expectations of the assumptions that you are making.

When we get down to the very basic aspect of this, science-based only means something is consistent with theory, or has used defensible methods to produce whatever result it's produced. It means absolutely nothing about what the nature of those results are.

When I say something's evidence-based, I know even less. I know that there's data of some kind, derived in some manner, that says this program was good or bad, or maybe indifferent. So if we want to be really explicit, what we should be saying is a compound structure that talks both about the effectiveness of the program, *and* the defensibility of the science regarding the data.

So you would construct something similar to 'this is scientifically defensible effective programming,' or 'this is an effective evidence-based program.' The idea is, really, that you want to convey two things. And the assumption that we always make is that both of those things are conveyed in each of those terms—evidence-based and science-based. So at some level, they are interchangeable because we assume people are hearing what we're…

W. HARDING: What I'm hearing you saying is, though, in the pure, objective case, they don't, necessarily, imply anything about outcomes. In fact, in the way that they're being used commonly in the field, there's an assumption that when you use these terms, they're programs that we've not only *studied* carefully and well, but that have produced the kinds of outcomes we would like to see these programs produce.

P. BROUNSTEIN: Exactly. Exactly.

W. HARDING: Whether or not that's the most rigid and accurate way to describe the terms or not.

P. BROUNSTEIN: Correct.

W. HARDING: It's the current use. Okay.

P. BROUNSTEIN: But that's the connotation of the terms. I would say that we intend them to mean something very similar.

K. KUMPFER: But there's a similar concept to that, that I think needs to be clarified. And that is that I think a lot of practitioners think if they do a program that's based on *principles* of effectiveness, that that makes them evidence-based. And you can do a program that you just make up that's based on all the principles, but still doesn't have any outcome results, nor will *get* you any good outcomes results. So you really also have to consider that, that principles, alone, of an effective program are not going to get you a program that, necessarily; works. It's usually good start in designing a program, but you'd still have to evaluate it.

W. HARDING: To prove that it's produced the outcomes that you'd hoped that it would.

K. KUMPFER: To prove that it works, right. Right. Whereas, the proven programs that Paul has—in his National Registry of Effective Prevention Programs—are programs that *do* have the science base behind them, the research, and show that they actually work. So it's best if you start with one that *already* has evidence of effectiveness, and work with that.

W. HARDING: That's helpful. And I think this ties back to a point that Paul was making, earlier, in the first segment before the break, which is that when you're thinking about making an adaptation to a program, it's good not to be willy nilly about it, and at least to be guided by the science-based principles. That is, the adaptations you make ought not violate those principles. And, if possible, ought to complement them in some way so that if the evidence shows that—as is true for both your programs, incidentally—that having families play a role in a prevention program is a terribly important component, then you ought not make an adaptation which eliminates, or terribly compromises that component. Is that…

P. BROUNSTEIN: Right on target.

W. HARDING: Okay. Fine. In terms of other questions and issues, from the developer's point of view—I'm, actually, not really clear about this, and I know it must be a challenge; maybe it's kind of like having a child and sort of wanting to see what happens to them over time—how *able* are you, how much capacity do you have, what can be reasonably expected of you, in terms of being able to track *how* your program is being used in the field, *how* it's being adapted, whether the people who use it—as you've both made the point—are delivering quality service? Are they the kinds of people delivering the program you intended to? And what's happening out there? Or is that, or large chunks of that, a large black box for you?

K. KUMPFER: Well, it's not a complete black box, but you bring up a really important issue. We train almost a thousand people a year in Strengthening Families, all over the country. And last year it was 456 agencies, 'cause CSAP makes us keep track of all this now, as Andrea knows. And we really don't, we can only get a sense for the quality of people that we trained in the trainings.

At some of our sites, they've contracted with some of our trainers to come back. Like, come back in three months. Come back in six months. And sometimes Henry and I come back, also, and go out and actually do a site visit.

W. HARDING: Henry's your colleague.

K. KUMPFER: Henry's my husband. He's now taken over the training system. And that really helps to get a sense for actually seeing the program in action, then we can see what kind of adaptations they've made. And quite often, the adaptations are wonderful. That's when we start incorporating them back into the core program, when we see really clever things that people have done.

Like recently, a number of the sites just, spontaneously, started having the kids in the children's group—the kids are getting harder and harder to control their behaviors. There's more and more hyperactive Attention Deficit Disorder kids. But they discovered that with the children's manuals they have there with all the cartoons, if they just give them crayons and let them color while they're participating in the group, they double track the whole thing, they're raising their hands, answering questions, and they're coloring, but they stay in their seats. So they've discovered adaptations that you wouldn't say it's not changing the curriculum, it's just the way you implement it to make it more effective. We've learned a lot of little tips like that from the different sites by going back out, again, and observing, and working with them. But I wish we could do more, 'cause I think we could…

A. TAYLOR: I would say that, for me, it's not a black box, but it's a gray one. That would be the way I would describe it. I do provide technical assistance. And I also want to make this point to potential implementers that it's not only the initial training that you receive, but it's also the technical assistance that you seek out, and can be provided, that will really help to make your program go.

The difficulty that I have is that while I am training other people to become trainers in the model, right now I'm only one person. And I provide technical assistance to the people who call me; however, it's the squeaky wheel that gets the grease, so that I have a limited capacity to really go back and track the sites. I'm now, actually, bringing somebody on board to help me do that in a more consistent way, and we've developed a survey, and she's going to actually be contacting sites. But I think that's a really critical piece, because as I said, the initial training is kind of like the tip of the iceberg. And this is what I call the 'You don't know what you don't know 'til you realize you don't know it' phenomenon, which is that when you get into the implementation, you'll say, "Oh yes, I

know she said something about that in the training, but I can't now remember what the answer was." So you really need a lot of consistent support as you're going about doing this.

P. BROUNSTEIN: This also varies as a function of developer because some developers who are just getting into the dissemination of their program don't always make claims on the people who are adopting the program. Others who've been doing this for years have agreements that say you need to report your data back to me. And so they have more of a quality assurance mechanism built in.

One of the things, of course, that the outcome monitoring system that I described will start to do is kind of point to where we need *more* in the way of quality assurance. But it's a great idea for every developer to start talking to the people they train about keeping tabs, not just for the sake of feeding back to the developer, but for the sake of monitoring how well the program is actually being implemented. Because there's not a single person in this field who is not well-intentioned, who doesn't want their program activities to lead to positive changes in the people they're dealing with.

And when you finally get across the notion that the best way to do that is to start taking a hard look at where you're getting to—in terms of the progress you're making with the program—all of a sudden the monitoring function gets built in, and the quality assurance gets built in. It's not easy to do, though.

W. HARDING: I have two kind of thought questions as we come toward the end of the discussion period. Then I'm going to kind of outline both of them, so you get to think about them a little bit along the way.

The first one is to ask you if you know of, or could think of, guides or resources or materials that people ought to keep in mind as resources for them, as they begin to wrestle with the issue of fidelity and adaptation. Anything people ought to really be looking at out there that's important for you to keep in mind?

And then I'm going to ask all of you to think back, and perhaps, comment on the one or two big messages that you want to get across. And we have only a few minutes to do this. So are there resources that anybody can think of? Paul?

P. BROUNSTEIN: SAMHSA has a couple of web sites, and CSAP is, of course, one of those. But the model programs web site will have a number of concept papers that are currently built, regarding fidelity and adaptation.

The annual report that we do, which is an update of Prevention Science, is also online. It can be downloaded, or ordered through NCADI, which is our clearinghouse. Those materials are there, and they'll talk about both issues of fidelity and adaptation. And in the case of the annual report, we'll talk about the core components analysis that we've dealt with. And within a relatively short time, as we talked about, we'll be getting some data in.

W. HARDING: Okay. Anything to add, quickly?

K. KUMPFER: Well, there's the one article that I published with my associates in Prevention Science, just was like in October or November. Also, I've written all of this up, in terms of steps that a program should go through, in terms of making an adaptation to a science-based program. And *twice* now, it's gotten cut out of longer book chapters or publications. I just offered it to Paul, so I'll be sending it out to CSAP to see if they can find that as useful. I think it would be helpful, because it's the steps that we found that the local practitioners have had to go through in order to do a good adaptation of a science-based program.

W. HARDING: Maybe that's something that can find a home on one of the web sites we were discussing.

In the next minute or so, any last minute words or comments, things you meant to say, or didn't? Things that you'd just really like to emphasize on the way out?

A. TAYLOR: I would like to reiterate a point that I think everybody has made here, which has to do with the fact that it's very important to really do your homework. It's important for a community to do a careful needs assessment. It's important for a community to assess who are the partners out there? What is it that everybody can contribute? It's important to call the developer of the program to really make sure that you have those program components, that you *can* address the fidelity issues. It's important to get the training. It's important to use the existing materials. And then to work with the developer around the adaptations that you might need to make. But planning, planning, planning is essential. And so that would be my last word.

W. HARDING: Good. Thank you very much.

K. KUMPFER: I'd like to have one last word. And that's something that both Andrea and I talked about, and that was fidelity does not, necessarily, ensure quality, that you really do need to be very, very careful in your selection and the *training* of your staff.

Only certain people are really *good* at implementing these programs with certain kinds of clients. And so that is part of, I suppose, the planning at the beginning. I know you do screening, Andrea. We do screening, too, when we go out to do trainings. We say, "Train as many people as you possibly can train. Train all your referral sources. Don't expect the people who, necessarily, will be implementing these programs will be from your staff." You may want to contract. It may be that it turns out in one site it was the receptionist ended up probably being the person for the parent group, and another person who is from out in the community who is the best person for the children's group. So it's the selection, the quality of those people come through when you see them doing their practice sessions. And that makes a big difference. Some of these you're *never* going to train a person to do. It comes from their natural, instinctive abilities to relate, to be respectful, to be really enthusiastic and caring with their clients.

A. TAYLOR: I wanted to ask Pam, too, if she had a…

W. HARDING: I'm afraid I have to interrupt, because it's fallen to me to summarize, and we have to be on time today, I'm sorry to say.

I think it's clear that I think we've all agreed that high fidelity certainly *increases* the chances of your achieving successful outcomes. But there are, clearly, times when adaptation is needed, and when it's appropriate.

For example, when you're using the program with a cultural group for which it was *not* originally designed. And in some cases we've heard today, adaptation can actually *improve* outcomes.

Karol pointed out, for example, that recruitment and retention in the Strengthening Families Programs improve by some 40 percent, as I recall, in *response* to cultural adaptations that were made, that were appropriate. So it can be of benefit.

And Paul—as he was discussing the cross site findings at the outset of the day—pointed out that programs that were culturally adapted had much larger *effect* sizes than programs that had not been culturally adapted.

We know that adaptation is common, and sometimes, perhaps, *too* common in the field, and raises problems. The problem is for *us* to know, and for practitioners in the field to know when adaptation is complementary add appropriate, and when it risks degrading program performance. Put another way, the problem is how to *balance* these two things—fidelity on the one hand, and adaptation on the other—in order to maximize the chances of achieving positive outcomes. And this, we've heard, is a challenge for everyone—for developers, for funders at the federal level, for researchers, and so on.

I think the good news, today, is that there are some guidelines that are available for how to make adaptations, and how to do so, appropriately. Paul offered us some guidance on the core components analysis, earlier today. And we've heard others, as well.

We've also heard advice about what program implementers should do to seek guidance about the adaptation problem, that they should, as Andrea pointed out, always consult with the program developer and seek guidance from them about what should be done. And the program developer may have insights into how this program has been adapted elsewhere, and with what degrees of success.

And we heard direct advice today, I think, from developers here about what changes *could,* and what changes *should not* be made in these two programs. And that was very helpful.

Part of the advice we heard was become intimate with the program, do your homework and your planning in advance, do a careful assessment of the needs in your community,

and the fit between this program and your community needs. Have the program developer review the adaptations that you propose, and the way that you propose to do that.

I would add to that, as well, that sometimes I think we're too eager to adapt as a first response to a problematic fit between the program and community, and maybe the first response is to increase capacity, instead. Or at least to try to increase capacity even when resources are short.

And one last issue that we heard mentioned, many times, was the need to track, carefully, what we do, and study, carefully, the consequences of the adaptations that we make. And with that I'm going to turn things over to Deb McLean Leow, again.

D. MCLEAN LEOW: So we've come to the end of our satellite broadcast for today. And in closing, I'd simply like to echo some of the comments that were made by our panelists today.

I think one point that's worth reiterating is the importance of monitoring the implementation of the programs that you have selected, and that you're implementing, for both fidelity and adaptation. And I encourage you and invite you to use all of the tools, and the protocols, and the checklists that are available from the developer of these programs. They're your best source of information.

But I'd also like to encourage you to contact implementers—other folks in your community—who are implementing these programs, and learn about their experiences implementing these programs.

And, finally, I'd like to encourage you to contact the CSAP Technical Assistance Centers. For example, contact your regional CAPT. Contact the model programs contract. The information about the national CAPT system is available at <CAPTUS.org>. That's C-A-P-T-U-S dot org.

And information about the model programs contract is available at <modelprograms.SAMHSA.gov>. Is that correct, Paul? Okay. Fantastic.

I think the second key point that I want to echo is the importance of keeping yourself current, and getting information about these programs. And the two web sites that I just shared with you will have ongoing information about model programs.

Finally, I'd like to say that if you have registered online, we will add you to the National CAPT system mailing list, where we will keep you informed about information related to model program implementation. And we will keep you posted about products and upcoming events that will follow on to this particular broadcast.

In closing, I'd first like to thank our viewing audiences out there. And for those of you who've had technical problems, I want to let you know that there is going to be a video of this broadcast, available from your national CAPTs. And the broadcast will also be

available on the NCADI web site. So if you have missed part of this broadcast, or if you're having technical difficulties, you will be able to view it from the videos.

I'd like to thank our distinguished panelists today. I'd like to begin by thanking Dr. Brounstein, Dr. Kumpfer, Dr. Taylor, and Ms. Adderley, as well as Dr. Harding, our moderator for doing such a wonderful job.

And last, but not least, I would very much like to thank the National Guard, without whose help and expertise, broadcasts such as this would not be possible.

If you're interested in additional information about your National Guard Center, what I'd like to encourage you to do is contact your state National Guard headquarters, and ask to speak with the counter-drug coordinator.

Once again, I want to thank you all for participating in today's event. And look forward to forthcoming information from us. Thank you.

[END OF TAPE]